COMPOUNDS OF THE

SAFRAMYCIN-ECTEINASCIDIN SERIES, USES, AND SYNTHESIS THEREOF

Abstract of the Invention

Compounds of the saframycin-ecteinascidin series with cytotoxic properties having the following general formula, their uses and synthesis, are disclosed:

$$R_{10}$$
 R_{10}
 R_{10}
 R_{10}
 R_{11}
 R_{10}
 R_{11}
 R_{11}
 R_{10}
 R_{11}
 R_{12}
 R_{12}
 R_{13}
 R_{14}
 R_{15}
 R

wherein R_1 and R_4 is H, a C_1 to C_4 alkyl group, or an acyl group;

wherein R_2 is an ether, ester, amide, or a phthalimide group; wherein R_3 is =0, OH, an ether group, an acyl group such as OC(O)Me, OC(O)Bn and OC(O)Et, or a sulfide group; wherein R_5 is H, halogen, OH, an ether group, an acyl group, or an amide group; wherein R_6 is =0, OH, OCH₃, CN, or an acyloxy group; wherein R_7 , is =0, OH, halogen, an ether group, or an acyl group; wherein R_8 and R_9 are independently H, CH₃, OCH₃, OC₂H₅, CF₃, halogen such as Br and F, or R_8 and R_9 are joined together as a methylenedioxy group, or other five or six membered ring; wherein R_{10} and R_{11} are independently CH₃, OCH₃, OC₂H₅, SCH₃, or SC₂H₅; wherein R_{12} is H, a C₁ to C₄ alkyl group, or an

acyl group; and wherein the chiral center marked \ast has the R or the S configuration.